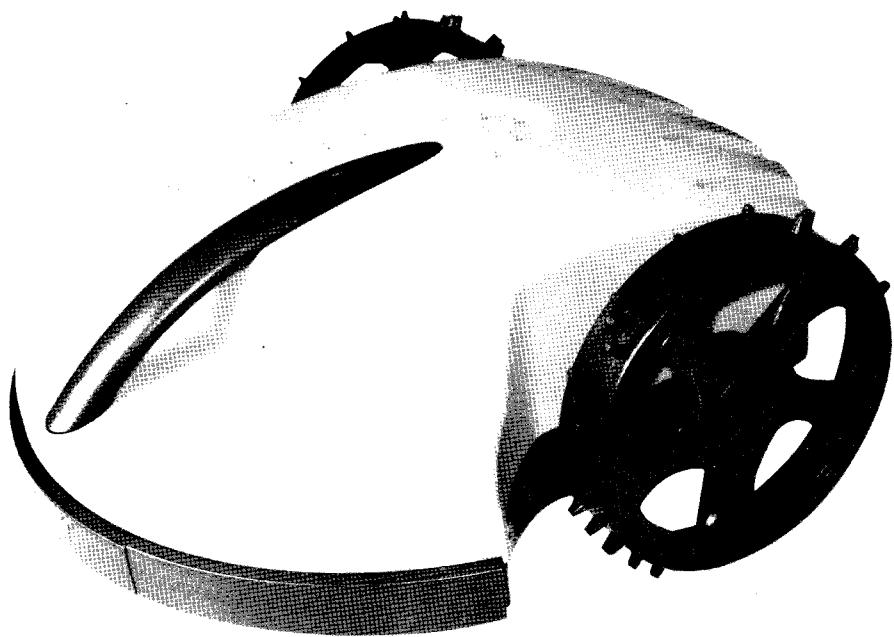

ROBOT MOWER USER MANUAL



TC-G158
CE ROHS

Please read this manual before use
Please keep this manual for future reference

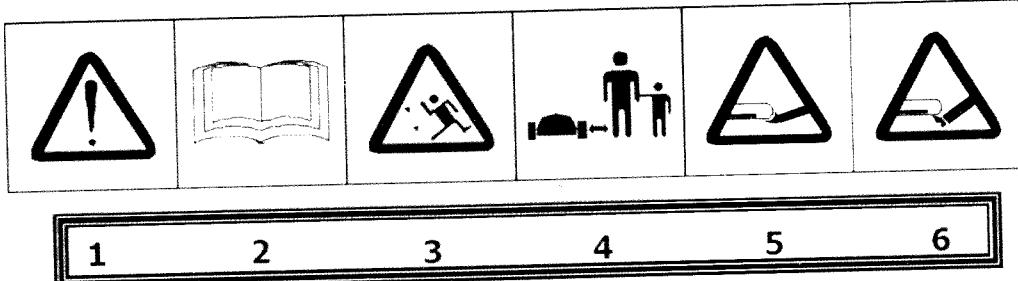
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SAFETY WARNINGS & PRECAUTIONS

1. Read the owners/operating manual carefully and follow all safety and warning instructions.
2. This machine has sharp rotating blades! Never allow the mower to operate unattended; keep bystanders, children and pets away from mower when in operation.
3. Never allow anyone to ride or sit on mower.
4. Never allow children or person who is not familiar with the safe operation of the mower to operate the mower.
5. Keep hands and feet away from the cutting blades and other moving parts.
6. Never attempt to service or adjust the mower while it is in operation.
7. Inspect and clear the mowing area of all debris before operating the mower.
8. Never raise the mower or attempt to inspect the blades while the mower is operating.
9. Always turn off the power before lifting the mower or attempting any adjustments.
10. When operating the mower in manual mode, maintain a safe distance from behind or around the mower and wear proper foot apparel.
11. Do not operate the mower on slopes greater than 20 degrees or use it in manual operation on slopes where a firm footing is not possible.
12. Do not operate the mower if any safety feature or device is damaged or inoperable.
13. Do not attempt to disable or defeat any safety feature or device.
14. Use heavy gloves when inspecting or servicing the blades.
15. Wear eye protection and use gloves when installing the virtual wire and driving the wire stakes/pegs. Firmly drive all pegs in order to keep the wire from becoming a tripping hazard.
16. Do not use the Charging Station power supply with an extension cord.
17. Use only the original equipment power pack and power supply/charger with this mower.
18. Do not use the power supply/charger if the cord has become damaged.
19. Do not place metal objects in the area of the charging contacts on the Charging Station.
20. Do not place metal objects across the charging pins of the Mower.
21. Do not spray water directly into the docking area of the Charging Station or onto the operating panel of the charging station.

SAFETY INFORMATION

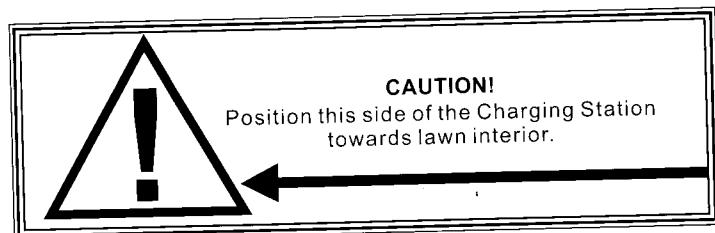


1 2 3 4 5 6

1. WARNING-this is a dangerous power tool. Use care when operating and follow all safety Instructions and warnings.
2. Read the owner/operating manual carefully and follow all safety instructions.
3. Objects can be thrown from mower while operating, take caution.
4. Keep children, pets and bystanders away from mower.
5. Sharp rotating blades. Keep hands away and do not attempt to lift mower from this area.
6. Sharp rotating blades. Keep feet away.

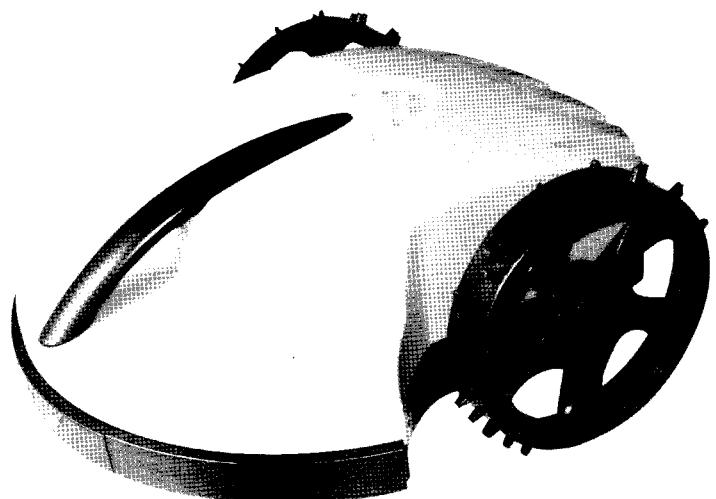


DANGER! Sharp rotating blades.
Keep hands and feet away.
Serious injury can occur.

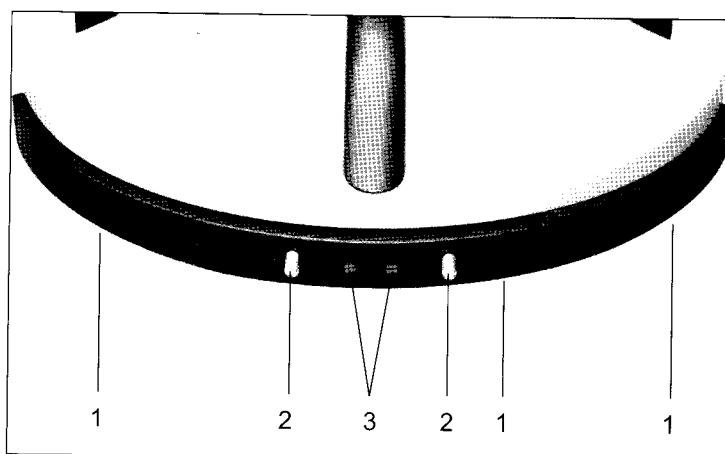


The Charging Station fence must face towards the interior section of the lawn when installed. Failure to do so may result in damage to property or persons.

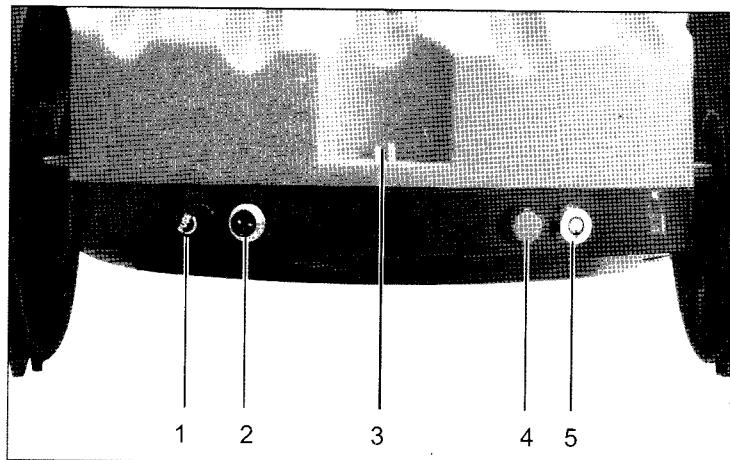
GENERAL INFORMATION



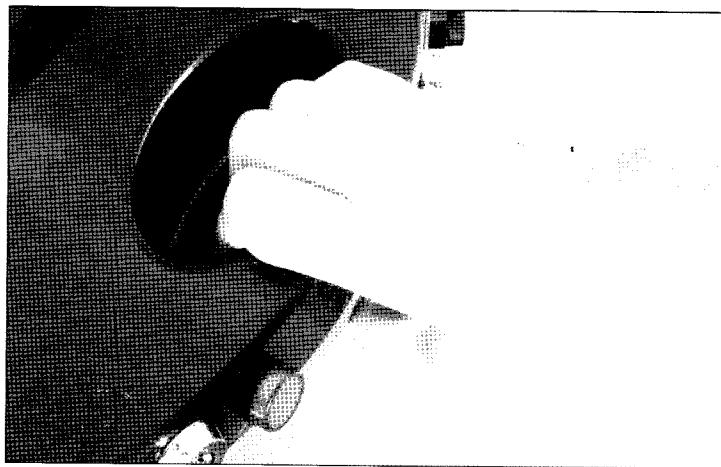
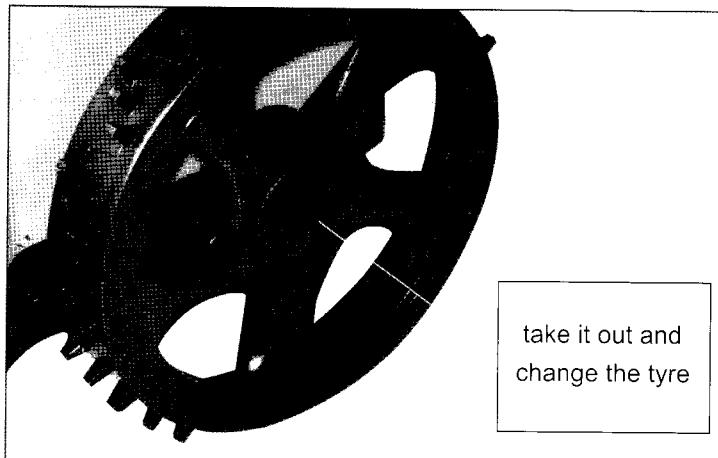
| | |
|---------------------------|--|
| 1. Mower | 6. Stakes for fastening charging station (4pcs) |
| 2. Remote control | 7. Pegs for virtual wire (100pcs) |
| 3. Charging station | 8. Blades (2pcs) |
| 4. Virtual wire 100meters | 9. Charger |
| 5. Key (2pcs) | 10. English manual |



1. Bumper: The mower meet the obstacle ,It can change the direction to cut grass
2. charging point
3. Infrared ray

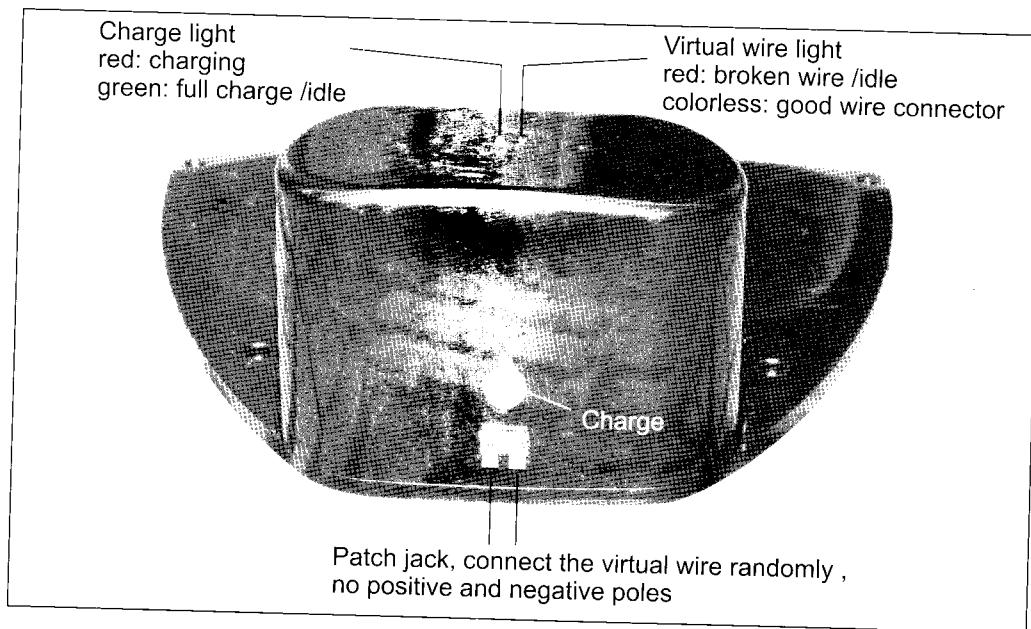


1. Fuse
2. Charge
3. Sense of rain
(it is raining , he will go to docking station)
4. Power light
5. Power Switch
“” on “” off

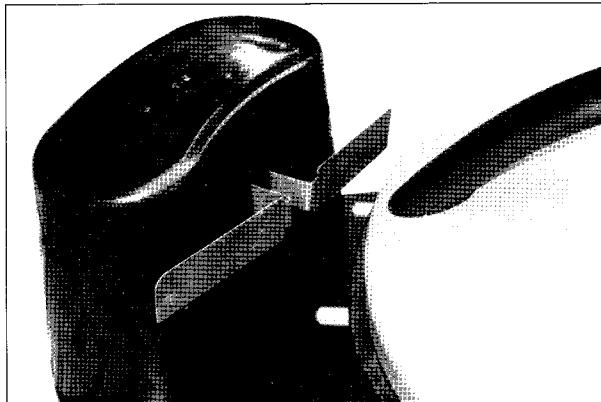




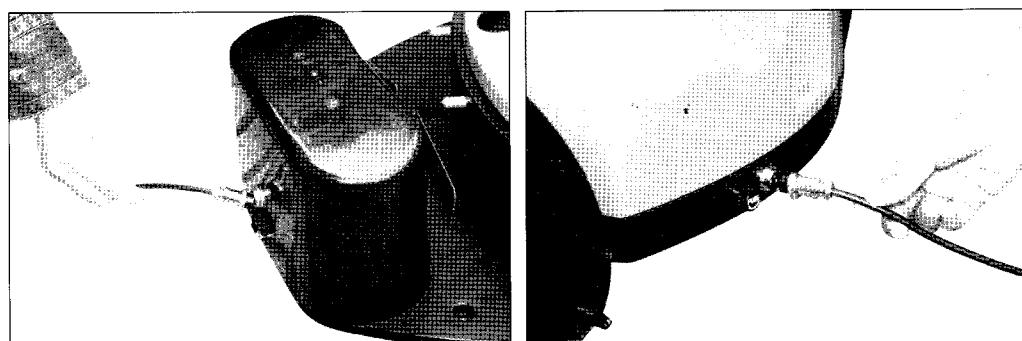
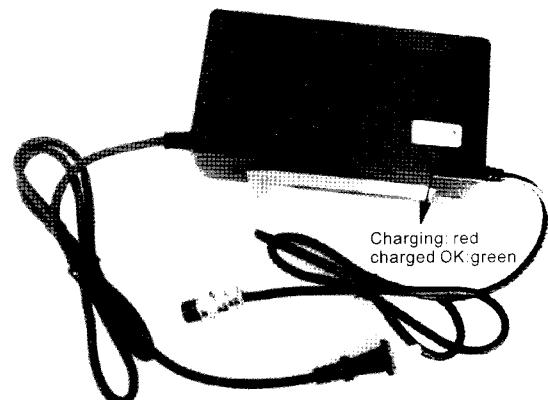
Safety hence , keep off the foot and hand



| | | |
|--|---|--|
| | <p>Power</p> <p>Model : CIRCLE</p> <p>GO STRAIGHT</p> | <p>L: GO LEFT</p> <p>R: GO RIGHT</p> <p>MOW : Mowing switch</p> <p>HOME : go charging station</p> <p>1H: working for one hour</p> <p>3H: working for three hours</p> |
|--|---|--|



- 1.The battery is low when he cuts grass , he will recharge and then he will cut again
- 2.Only when the mower finish charging, he drop back and buzzing (call the owner to turn it off)



Two kinds of charge as above pictures

TECHNICAL INFORMATION

Power supply input: 100-240V 50/60HZ

Output: 24V

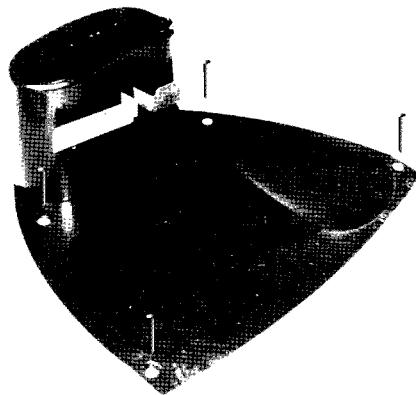
Robot mower technical information

| Model | TC-G158 |
|---------------------------|--|
| Coverage area /per | 600m ² ± 20% |
| Suggested area /per | 800-1800m ² |
| Cutting Power | 82W |
| Fully autonomous | Yes |
| Self design | Yes |
| Rain sensor | Yes |
| Wireless remote control | Within 10meters |
| Auto recharge | Yes |
| Blade adjustment | 2pcs blade, 14cm/L 1 pc |
| Anti theft | Yes, 2pcs key |
| Hill capability | 30degree Max slope 20KG/17.5KG with Lead-acid batteries 17/14.5KG with lithium batteries |
| G.W/N.W | |
| Cut size | 3CM/4CM ADJUST |
| Mower size | 56*51*25cm |
| Battery (be changed) | lead-acid / lithium battery24V, 7.2AH |
| Security | Lift sensor, buzzer |
| Waterproof | Yes |
| Charging time for battery | 3-4 hours |
| Mow rotate speed | 6000 rpm ± 10% |
| Noise | ≤65db |
| Average working time | 2-3 hours |
| warranty | 2 years |
| Battery | 1 years |

INSTALLATION

Charging station & Virtual wire set up

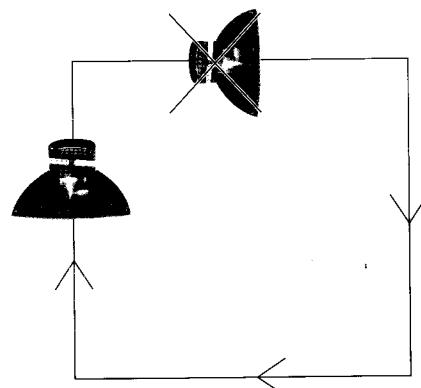
1. Charging station



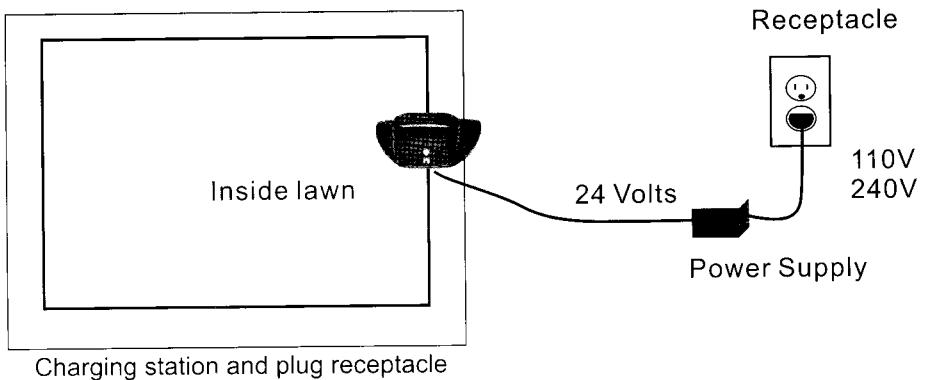
Charging station with stakes

Notice :

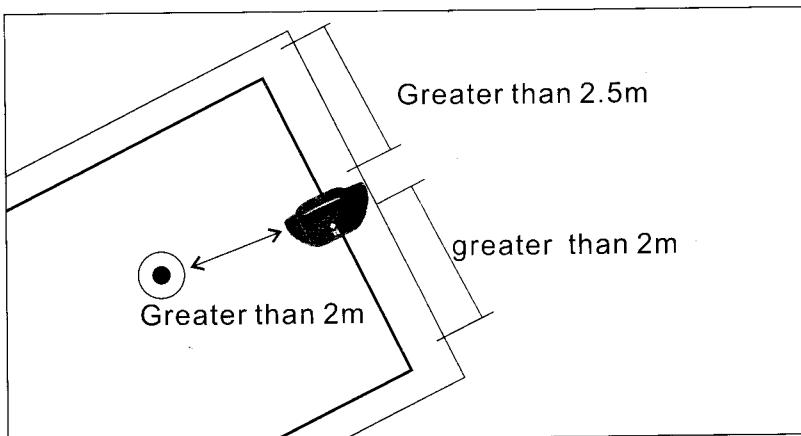
Before fix the station on the lawn , you should examine your lawn and decide the best location.
it is easy for the mower to find the station to recharge . check the following pictures :



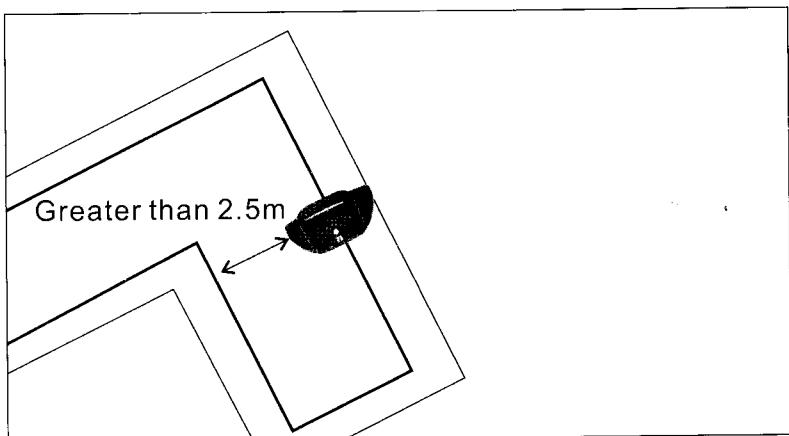
1. Ensure the charging station is placed in a level station that is easy to recharge
2. Ensure there is no obstacle in the front of charging station.
3. Ensure keeping 2-2.5 meters of the straight-line distance in front of the charging station.



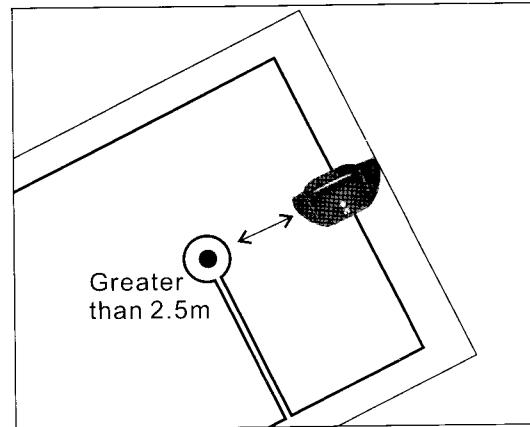
Charging station and plug receptacle



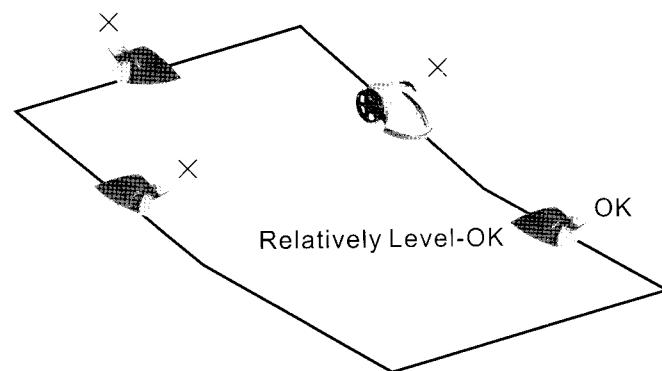
A minimum distance from the charging station and any obstacle is 2 meters. Make sure the distance from corner to charging station is at least 2 meters.



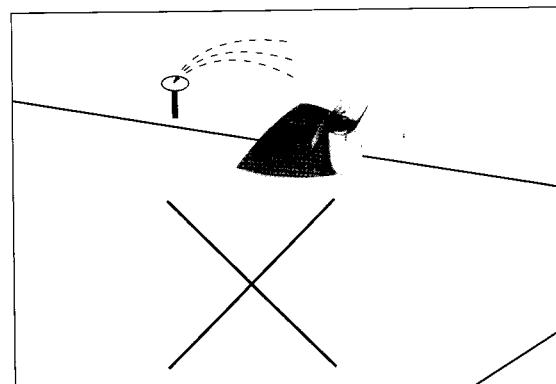
Make sure the minimum distance from charging station and virtual wire is at least 2.5 meters.



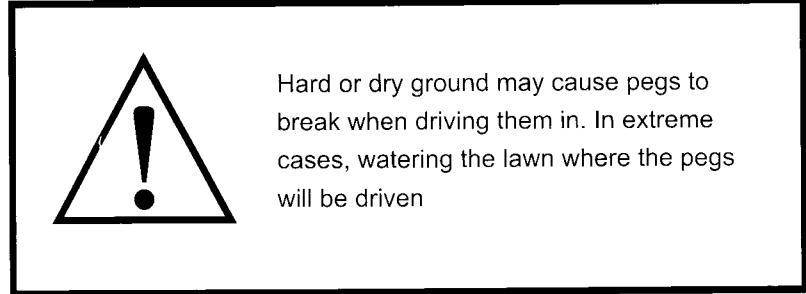
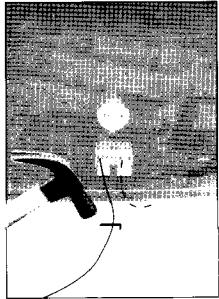
The distance between charging station and virtual loop should at least 2.5 meters.



Please fix the charging station in the level place.



Please keep the charging station away from water.



Pay attention to the short distance and long distance .

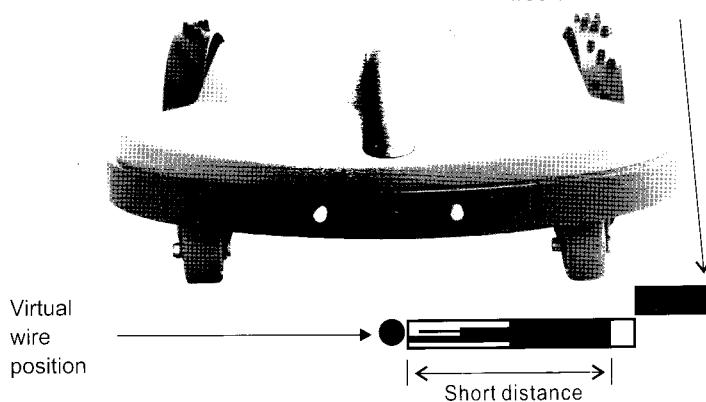
Because the lawn is anomalous in general .

30cm Short distance: area outside is same level or the virtual wire is straight

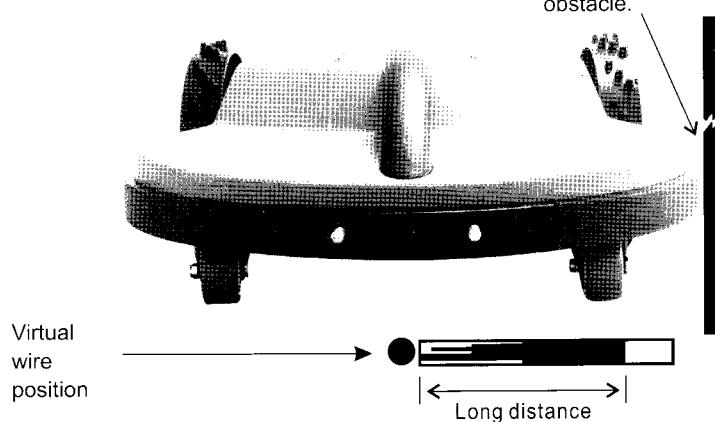
50cm Long distance: area outside is an obstacle or the virtual wire is greater than 90°.

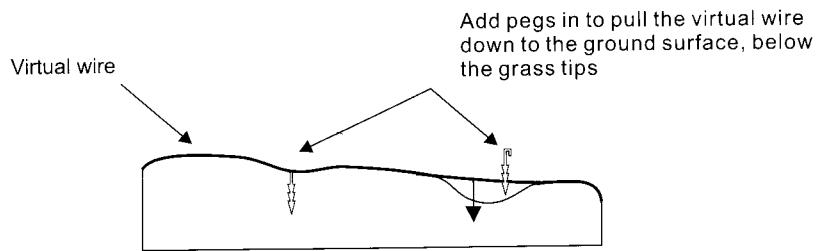
Corner,angle

Area outside virtual,
same basic level and
free of obstacles.

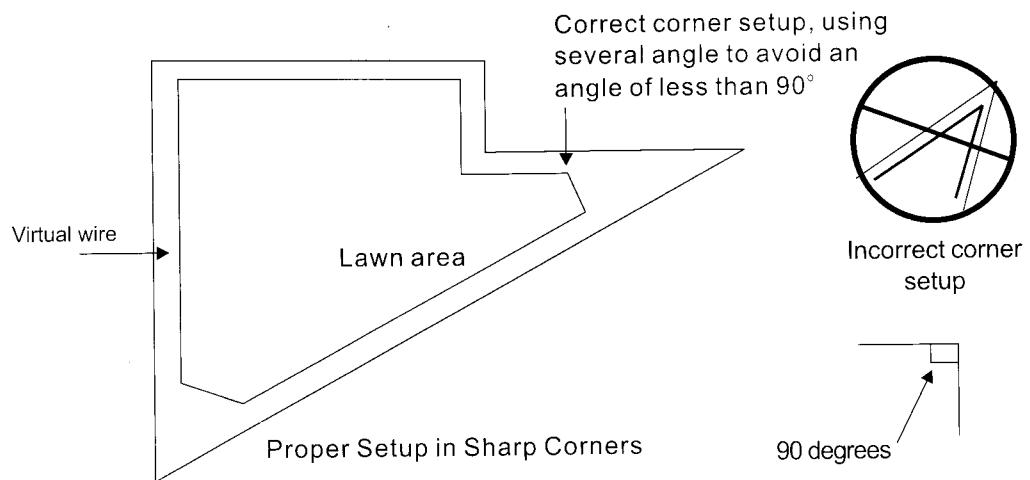


Area outside virtual.
Has a wall as an
obstacle.



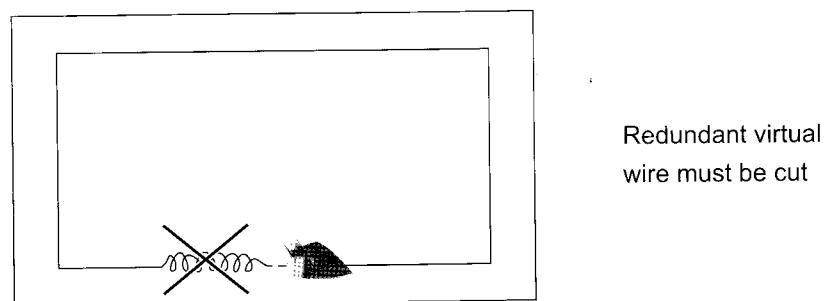


Bury the virtual wire below the grass , possible fasten on the ground . The mower can not cut the wire and when the grass grow up , we can keep the virtual wire station as before.



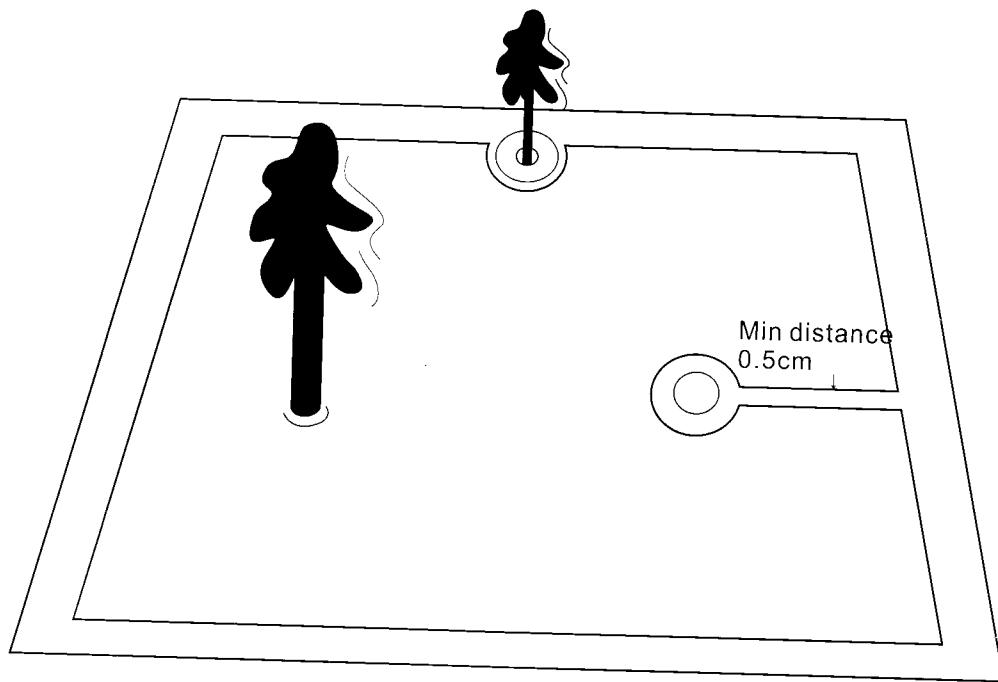
Care must be taken not to create a corner sharper than 90 degrees when setting up the virtual wire.

A corner sharper than 90 degrees can cause the Mower to lose track of the virtual wire.
We can make greater than 90 degrees corner to avoid this situation

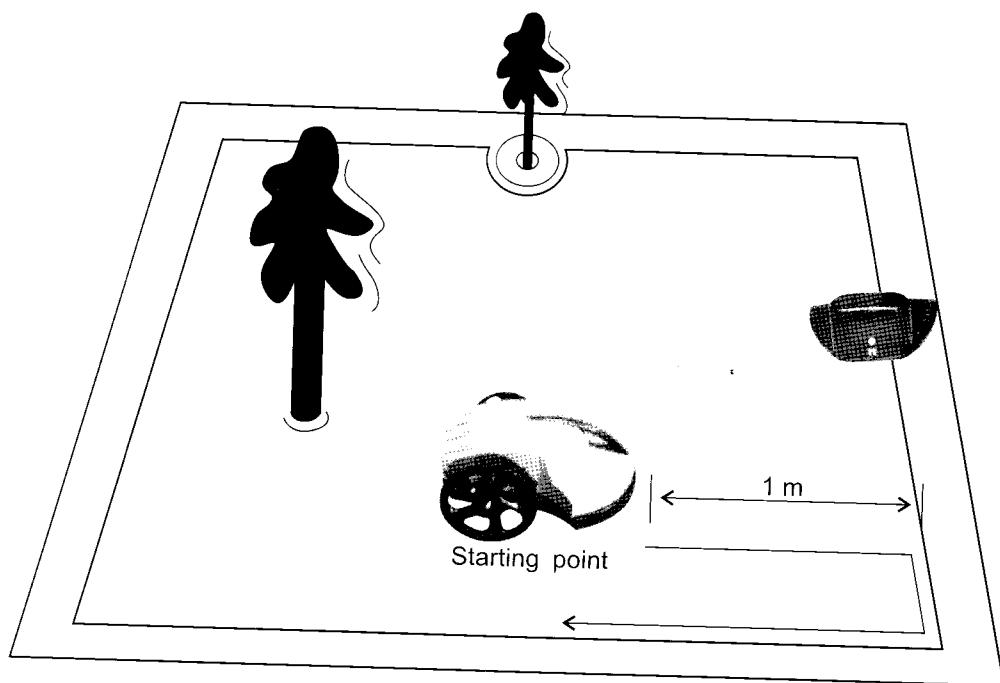


A maximum virtual wire length of 300m is recommended .
Areas requiring longer lengths should be broken into separate zones .

Follows are some situations ,how to bury the virtual wire .



Bury the virtual wire according to actual lawn.



Position the mower towards the wire after the charging station.

MAINTENANCE INFORMATION

BATTERY

Attentions for Lead Acid Batteries

1. Please don't remove the batteries privately.
2. Storage
 - (1.) Charge the batteries at least once every six months if they are at 25°C. The interval of this charge should be reduced to 50% by each 10°C rise in temperature above 25°C. The self-discharge rate doubles for each 10°C in temperature. If they are stored for a long time in a discharged state, their capacity may not recover even after charge. If the batteries are stored for more than a year at room temperature, the life of the batteries may be shortened.
 - (2.) Store the batteries starting from the fully charged state to prevent the life of the batteries being shortened.
 - (3.) Use the batteries as quickly as possible after receiving them as they gradually deteriorate even under proper storage conditions.

Attentions for Lithium batteries

1. Please charge the lithium batteries in accordance with standard time and procedures.
2. When the power is too low, it should be started charging as soon as possible.
3. Activation-The lithium batteries should be normally charged-discharged for 3-5 times to activate electricity back to normal capacity.
4. Storage-We suggest the optimum storage of lithium battery is with 40% power and keep in the shade.

TROUBLING SHOOTING

TROUBLESHOOTING

| Problems | Possible reasons | Solutions |
|---|--|--|
| The mower moves out of the area rounded by the Virtual wire or moves in circle searching for the Virtual wire | The virtual wire fails to send signals. The virtual wire is broken by the mower | Check the virtual wire light. Be sure the virtual wire is connected to the base station that is in motion, and there is no loose place |
| The mower does not work | 1. It is trapped in the lawn; 2. It moves to the area where the grass is thick; 3. The front wheel is lifted up. | Clear the lawn where the mower is trapped or restart the mower in another place. Then the mower will work in a new circle. |
| The mower buzzed | 1. The “power” button on the remote control is touched 2. Front wheel is lifted up 3. Blades are plugged up seriously and the power becomes inefficient 4. The mower stop when he can not meet the grass in 5minutes. | 1. Press “power on & off” button again. 2. Restart the mower. 3. Turn off the mower, and charge it manually. |
| The remote control does not work | The electricity power is low | Change batteries |
| The batteries can not recharge | | Check whether the charger is well connected |
| Large patches of uncut grass remain after Mower has completed mowing | Power is not fully charged for operation | Charge again until the power light “green” |
| | Power nearing natural end of life | Replace the battery and follow the maintenance |

| | | |
|--|---|---|
| | 1. Grass is extremely overgrown or very wet | 1. Cut the grass appropriate height |
| The bumper does not activate when meeting obstacle | Jiggle switch is broken | Send the mower to provider and repair |
| Mower gets stuck frequently when traveling optimal terrain | Low ground | Raise ground clearance to the uppermost position |
| | Cutting height too low | Raise cutting height |
| | Terrain needs landscaping repairs | Fill in all holes , cover or exclude all exposed roots In order to smooth the terrain |
| Mower does not complete the edge | Obstacle along the path | Watch the full operation of edge and confirm no obstacle are present |
| Mower lamp not flashing when the blades are in operation | Faulty power lamp | Replace operating lamp |
| Mower drives but blades will not mow | Mow on RC has been turned off | Turn on the mower button |
| Short run time , operates less time than normal | Power is not fully charged for operation | Charge again until the power light “green” |
| | Power nearing natural end of life | Replace the battery and follow the maintenance |
| Mower does not detect the charging station contacts | 1. Grass is extremely overgrown or very wet Power supply is not plugged into the main power supply | 1. Cut the grass appropriate height Confirm power supply is plugged into the main power supply |
| | No power to plug receptacle or main power is shut off | Check the power Check the plug |
| | Charging station /the virtual wire corrosion | Check the charging station Contact your provider id the contacts is replaced |

Mower is operated in the zone with the charging station but stopped

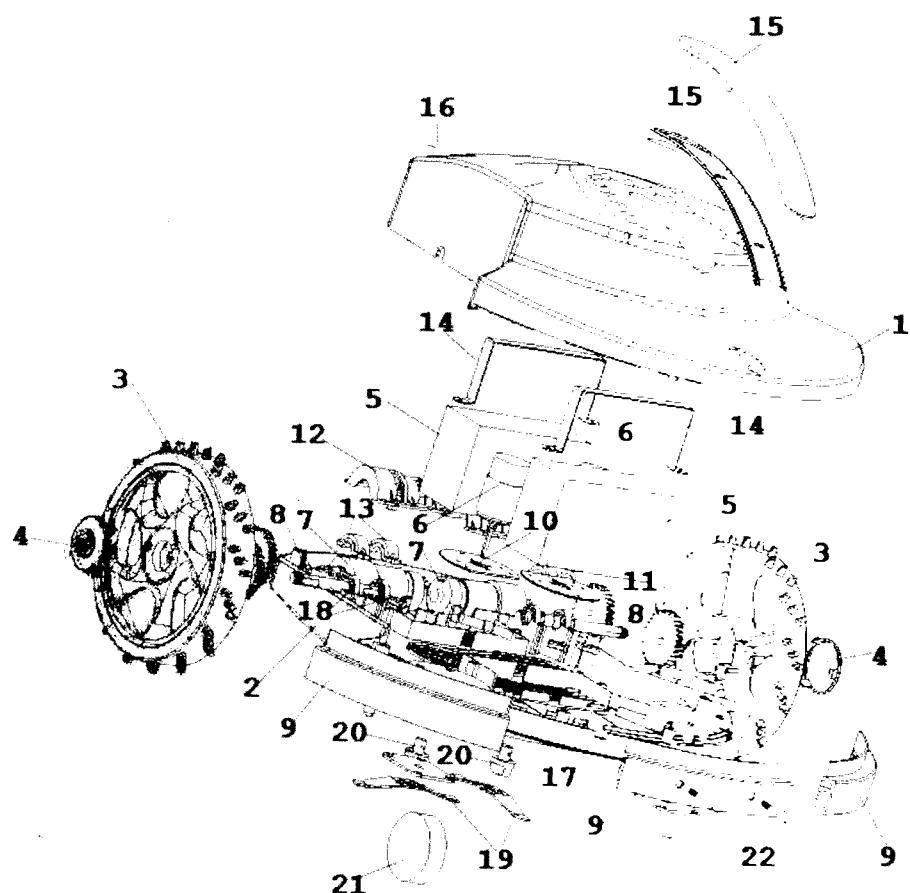
No power

turn off the power by keys and takes it to charge .

Mower reached the charging station when its contacts are above the charging station contacts

Height difference between the charging station base and the lawn surface at the entrance to the charging station

Confirm the ground before the charging station is leveled with the charging station base if necessary fill area with dirt and level off



21

| | |
|------------------|----------------------------|
| 1.Upper cover | 12.Motor pressure plate |
| 2.Bottom cover | 13.Bearing pressure plate |
| 3.Wheels | 14.Batten of battery |
| 4.Shell | 15.Handle |
| 5.Batteries | 16.Rain sensor copper head |
| 6.DC motor | 17.Springs copper sheet |
| 7.Slowdown motor | 18.Bearing |
| 8.Axle | 19.Blades |
| 9.Bumper | 20.Blades post |
| 10.Motor gasket | 21.Omni-directional wheels |
| 11.Gear | 22.Charging copper head |